

Lesson 8: Sustainable Eating, Healthy Foods, and Community Gardens





Lesson 8: Sustainable Eating, Healthy Foods, and Community Gardens

Snapshot

This lesson brings together ideas from the previous seven lessons and explains the concept of sustainable food through discussion of how food travels and the importance of community gardens, and how they are linked to healthy eating.

Preparation and Materials:

- Posters 1–3, Take-Home Talk
- Flip chart and markers
- Black or white board

Note: This lesson should be taught toward the end of the program in order to have the most impact.

- If you or your students are interested in learning more about how to form a community garden, please visit the EPA Brownfield's site: www.epa.gov/brownfields/urbanag/steps.htm.

Suggested Giveaway: List of foods that are grown locally, list of local farmers markets, maybe even bring in some local fruits (see EPA Healthy Kids Website for a list from your area of foods that are grown locally)

Objectives—Students will be able to:

- define *sustainable*, *local*, *community garden*, and *nutrition*;
- explain how air, water, food (soil), shelter, and sun impact gardens and food; and
- discuss the connection between climate change and food, and clean waterways and food.

Vocabulary: sustainable, local, community garden, nutrition

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Procedure:

1. Introduction—Defining Nutrition *(5 minutes)*

Optional Activity: Have You Ever Eaten ...? *(5 minutes)*

2. Food Travels and Climate Connections *(15 minutes)*

Community Gardens and Surveying Walk *(20–30 minutes)*

Optional Activity: Researching Locally Grown Foods *(30 minutes)*

Teacher Note: How this activity is structured will depend on the resources available to you—computers with Internet access, local library, etc.

Optional Activity: Invite a Local Farmer to Speak *(20–30 minutes)*

Teacher Note: If a farmer comes to speak to the kids, this should likely be a separate session that could pair well with researching local foods.

Optional Activity: Visit a Community Garden or Meet with a Community Gardener *(30 minutes)*

3. Close and Take-Home Talk *(5 minutes)*



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1. Introduction

Defining Nutrition (5 minutes)

Teacher Note: The issue of healthy eating may be a sensitive one for students whose diets are not that nutritious through no fault of their own. Their family may not provide, or have the means to provide, a balanced and nutritious diet. As you are leading this discussion, be aware that this issue may cause some tension and refer to your organization’s policy and practices for addressing sensitive issues.

Review

Ask several students to share something that they remember from the previous lesson.

Prompts: What have you learned that you didn’t know before? What did we talk about that you already knew? What surprised you from our last lesson? What are some of the new words that you learned from our last lesson? What can you do to positively impact the issue we learned about?

Ask

We know that all living things need four things in order to stay alive—what are these things? [*Air, water, food, and shelter.*]

Explain

Today, we’re going to talk about food—how we get our food, what we need to eat to ensure that we stay healthy, and how to eat food that helps both the Earth and everyone on it to stay healthy.

Ask

First things first: I know that you have all learned about how important it is to eat a balanced, nutritious diet full of healthy foods. What are healthy foods? And what makes up a balanced diet?

Prompts: How many food groups are there? Can you eat only one thing and have a balanced diet?

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1. Introduction—Defining Nutrition *(continued – page 2)*

Explain Ask

In order to have a nutritious diet—one that gives us the energy, vitamins, and minerals that we need—it needs to be varied and include healthy foods. Where does this food come from?

Prompts: Do you grow it? Do we grow food here? Who grows food? Who raises cattle? Traditionally, the food and animals that we eat have been raised on farms and farther out from the city and the suburbs. Let's look at this a little more closely.

Optional Activity: Have You Ever Eaten ...? *(5 minutes)*

Explain

Let's think of fruits and vegetables that we all love—the really yummy ones we like to eat—and let's see who here has tried them before. I'll start—raise your hand if you've ever eaten [insert fruit or vegetable]. Select a student who has eaten that food to ask about the next fruit or vegetable.

Foods to prompt:

Apples	Oranges
Bananas	Kiwi
Papaya	Grapefruit
Mango	Pineapple
Broccoli	Spinach
Cauliflower	Brussels Sprouts
Kale	Lettuce
Zucchini	Squash
Tomatoes	Potatoes
Sweet Potatoes	Butternut Squash
Collard Greens	



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2. Food Travels and Climate Connections

(15 minutes)

Explain
Do

We're talking about food, but I'm going to ask you to look at your clothes. Everyone pair up with someone else.

Ask

Where do our clothes come from?

Prompts: Stores, companies, other states, other countries.

Explain
Do

Our clothes come from lots of different places, all over the world, and we sometimes don't realize that when we buy them down the street from where we live. So, let's find out where our clothes came from. Most shirts have a tag in the back of the collar that tells us where the shirt was made. *[Show **Poster #1** (Clothing label).]* If it's not in the back of the collar, it might be on the side. Working with your partner, find the tag and have the other person read where your shirt is from.

Do

*[Show **Poster #2** (map of the world).]* Go around the room and have each pair of students tell the class where their shirts were made. Write the names of the countries on the board. Be sure to tell the class where your shirt was made. As the locations are called out, show the students on the map.

Ask

We are wearing clothes from all over the world. *[List some of the places where the shirts were made.]* Our shirts should have passports! How did these clothes get from all of these places to us?

Prompts: Planes, trains, boats, trucks.

Explain

Well, the same way that our clothes come from all over the world, so does our food. When we go into grocery stores, we see food that was grown and processed all over the world and shipped to us.

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2. Food Travels and Climate Connections *(continued – page 2)*

Ask

What might be good about having food from all over the world?

Prompts: *[Alter these prompts depending on what grows indigenously or is widely known to be farmed or raised in your location.]* Are oranges grown here? What about grapes? Pineapples? Bananas? Do salmon live in the waters by us? What about cattle—are there a lot of these around?

Explain
Ask

Remember how we talked about the rotation and revolution of the sun and how it causes different seasons in different parts of the world? When it's summer here it's not summer everywhere and when it's winter here it's not winter all over the world. So, when it's cold here and we can't grow as many crops, it is warm in other places and they can grow there. Different parts of the world have different growing seasons—the part of the year during which rainfall and temperature allow plants to grow best.

Explain

One of the good things about having food grown in different parts of the country and the world is that we get to eat new and interesting things. It also means that if a region needs food, we can get it to them. Someone in another region might also be able to grow the food better than we can here because of the climate in his or her area.

Ask

What might be bad about having food brought in by planes and boats and trains from all over the country and all over the world?

Explain

Moving the food (and the shirts) around the world uses a lot of resources. We get used to eating things that don't naturally grow in our region and we want them.

Explain
Ask

In the last few years, there's been a large movement to help our environment by eating **locally**. What does it mean to eat locally?

Prompts: What can we grow locally? What grows well in our climate? Eating locally loosely means to eat the food that grows well close to you and animals that are raised in the surrounding area.

Ask

Why would eating locally help the environment?

Explain

If I buy an apple that was grown 2 miles away instead of on another continent, think about all of the gas, time, and energy that can be saved in getting it to me.

2. Food Travels and Climate Connections *(continued – page 3)*

Explain
Ask

Do you remember that we talked about how greenhouse gases are released when we use oil or coal? We would have to use a lot of oil or coal to get that apple from Europe or Africa to here. Can someone remind us what greenhouse gases are and why we want to generate less of them?

Prompts: Remember, they are released when we burn fossil fuels; they trap the sun's heat in our atmosphere and are making the overall temperature of the planet rise.

Explain
Ask

If the overall temperature of the planet rises, do you think that it will be easier or harder to grow crops? Eating food that is grown or raised nearby helps to reduce the amount of greenhouse gases.

Ask

If we were going to focus on eating locally, what crops and animals do you think would grow well in our area? *[Answers will vary depending on the area.]* What crops wouldn't grow well here?

Explain
Ask

There's also a push to eat more **sustainably**. What does it mean to eat sustainably?

Prompts: If you can sustain something, you can keep it going. Eating sustainably means eating food that is healthy for consumers and animals, and that does not harm the environment or workers and farmers during the process of growing/raising it. It also means treating animals humanely and supporting farm communities. *(Taken from www.sustainabletable.org.)*

Ask

Does this mean that some crops aren't good for the environment?

Prompts: What types of crops might not be good for the environment?

Explain

Sustainable farming means growing crops and raising animals that don't deplete the Earth too much. Some crops pull a lot of nutrients from the soil, so they take more resources to grow.

Ask

Is being healthy just about what we eat?

Prompts: What if we eat healthy food but just lie around watching TV all the time?

Explain

Being healthy also means moving our bodies and that's exactly what we're about to do!

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Poster #1



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Office of Children's Health Protection
EPA-100-K-13-002
www.epa.gov
April 2013



Lesson 8: Sustainable Eating, Healthy Foods, and Community Gardens

Poster #2



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3. Community Gardens and Surveying Walk (20–30 minutes)

Ask

Let's concentrate on growing food for a moment. What do crops need to grow?

Prompts: Do you remember the four things that living beings need?: Air, water, food, and shelter. Do plants need special air? Special water? What kinds of food do plants eat? Plants get their nutrients from the Earth. Do plants need shelter? Not in a traditional sense, like a house, but lots of crops are grown in greenhouses or otherwise protected from the weather.

Ask

A few minutes ago, we talked about how our food traditionally is raised by farmers in our area, around the country, and around the world. Can only farmers grow food?

Prompts: Have you ever grown anything? Have you grown a houseplant?

Do
Ask

One way that people are eating sustainably is by growing their own food in cities through community gardens. Have any of you ever seen a community garden? What is a community garden? *[Show **Poster #3** (photos of community gardens).]* What do you think a community garden includes?

Explain

Community gardens are set up in lots of different ways, but what they share in common is that people come together to grow food, herbs, flowers, and other plants on plots of land that they collectively take care of. They can also be in the middle of cities—in fact, there are community gardens in some very surprising places.

Explain
Ask

We are going to take a walk around our neighborhood and try to locate some spots that would be good for a community garden. What do you think we are looking for?

Prompts: How much space do we need? Do we want a spot that is entirely shaded?

Do

Take the group on a walk to locate potential community garden spots or take a walk to a nearby community garden.

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3. Community Gardens and Surveying Walk *(continued – page 2)*

Optional Activity: Researching Locally Grown Foods *(30 minutes)*

Explain

So now that we understand how much energy we save by eating locally grown foods, we need to discover what foods are grown around us.

Ask

Any ideas what foods farmers grow in our community and in our state? Have any of you seen signs in the grocery store that say “locally grown”? Or have you ever been to a farmers’ market? What foods were the signs talking about? What foods don’t we grow or raise here?

Prompts: Do we grow pineapples or bananas here? Do we raise chickens here? Do we grow apples?

Do

Let’s use the computers/library to find out.

Teacher Note: See the EPA Healthy Kids Website for a list of web resources on locally grown foods by region.

Optional Activity: Invite a Local Farmer to Speak *(20–30 minutes)*

Teacher Note: Having an actual farmer come to the class, or conversely visiting a local farm or farmers market, makes this lesson far more tangible and real for the students. Local farmers markets can be a good resource for locating a farmer who will talk to the students or whom the students can visit.

Do

Prior to the visit, review what the students have learned and talk about questions the students might want to ask the farmer, such as:

- How long have you been a farmer?
- Why did you become a farmer?
- What do you grow or raise?
- What’s the coolest part about your job? What’s the hardest part?
- How does the weather impact you?
- What do you think about climate change?

Optional Activity: Visit a Community Garden or Meet with a Community Gardener *(30 minutes)*

Do

Find out if there is a community garden in your neighborhood. If there is, ask if one of the gardeners would be willing to take the kids on a tour or come to the organization to talk to the group.

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Poster #3



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Community Gardens





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4. Close and Take-Home Talk

(5 minutes)

Explain
Do

Close your eyes and take a nice deep breath. We've covered a lot today. We have talked about what it means to eat locally and sustainably. Can someone please raise their hand and tell us what eating locally means? Can someone tell us what eating sustainably means?

Explain

We discovered some of the places that our clothes—and our food—travels from in order to get to us and we made the connection between climate change and food that comes from faraway places. Finally, we talked about community gardens as a way to eat locally.

Take-Home
Talk

The coolest part about learning something new is sharing the knowledge. Tonight, when you get home, I want you to talk with your family about the things that we learned today. What will you tell them? I want you to look around your kitchen and read the labels on your food to find out where it came from. If it traveled from far away to get to your table, talk with your family about how you might be able to get the same food from a place that's closer. Investigate farmers markets nearby and ask your family what they think about eating more local foods.

Explain
Do

*[Pass out **Take-Home Talk**.]* This Take-Home Talk sheet has some things that you can share with your family and some activities that you can do at home. See what you can accomplish on the sheet and we'll talk about it the next time we meet.



Take-Home Talk

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To Share:

- In order to have a nutritious diet—one that gives us the energy, vitamins, and minerals that we need—it needs to be varied and include healthy foods like fruits and vegetables.
- When we go into grocery stores, we see food that was grown and processed all over the world and shipped to us. This means that we get to eat many new and interesting foods. But moving food (and other items) around the world uses a lot of resources. And we get used to eating things that don't naturally grow in our region and we want them.
- Eating **locally** and **sustainably** is becoming very popular.
- Eating **locally** means eating food that grows well nearby and animals that are raised in the surrounding area, so less energy is used to transport it to you.
- If you can sustain something, you can keep it going. Eating **sustainably** means eating food that is healthy for consumers and animals, and that does not harm the environment or workers and farmers during the process of growing/raising it. It also means treating animals humanely and supporting farm communities.

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To Do:

- **Well Traveled to Your Table!** The next time that you go to the grocery store, investigate where the food comes from. The backs of boxes and jars will tell you where the food comes from (“made in” or “product of”) and fruits and vegetables should have signs that tell you where they were grown.
- Look in the produce aisle—what item has taken the longest trip to get to your store? Which canned food is from the farthest away? What box of cereal took the longest journey?



To Take Back:

- What was the coolest thing that you learned from talking about this topic with your family and friends?